

Claims

Please cancel claim 19.

1. (currently amended) A video system comprising a video-on-demand server and a remote client, a video-on-demand application executing on the server, the ~~server~~ video-on-demand application employing a first video-on-demand application control protocol comprising control data transmitted to control a video-on-demand application, the client employing a second video-on-demand application control protocol comprising control data transmitted to control a video-on-demand application, wherein the first video-on-demand application control protocol employed by the video-on-demand application is non-compatible with the second video-on-demand application control protocol employed by the client, the system further including a proxy interposed between the server and the client, the proxy including means for translating between the first and second video-on-demand application control protocols, wherein the server and client can communicate control data through the proxy even if the control data in the first and second protocols are different, and wherein change to either the ~~server or client~~ first or second video-on-demand application control protocol can be accommodated by a change to the proxy rather than to the client or server, respectively.

2. (currently amended) The system of claim 1 wherein the proxy further includes means for translating between at least one of said first and second video-on-demand application control protocols and a third video-on-demand application control protocol comprising control data transmitted to control a video-on-demand application and different from said first and second video-on-demand application control protocols, wherein the same proxy can be used in different server/client environments.

3. (original) The system of claim 1 wherein the proxy includes means for ameliorating aberrant behavior in at least one of said server or client.

4. (currently amended) The system of claim 3 wherein the proxy includes means for detecting a predetermined input communication in an input video-on-demand application control

protocol, and issuing an output communication in an output video-on-demand application control protocol that does not exactly correspond to the input communication.

5.-16. (canceled)

17. (currently amended) In a video-on-demand system including plural clients receiving on-demand video originating from at least one video server communicating according to a first video server application control protocol and wherein at least one of said plural clients communicate according to a second video server application control protocol incompatible with the first video server application control protocol, a proxy server computer interposed between the video server and ~~the~~ said plural clients, the proxy server performing a method comprising:

assigning a first transmission channel to a first client to transmit an on-demand video thereto;

assigning a second transmission channel to a second client to transmit an on-demand video thereto;

C1 cont. using the first video server application control protocol, instructing the video server to transmit on the first transmission channel and instructing the video server to transmit on the second transmission channel;

using the second video server application control protocol, instructing the first client to receive on the first transmission channel; ~~instructing the video server to transmit on the second transmission channel~~; and instructing the second client to receive on the second transmission channel.

18. (previously presented) The method of claim 17, wherein the proxy server reassigns the first client to a third transmission channel at a point between the beginning and end of the first client's on-demand video, so as to manage channel resources.

19.-24. (canceled)

25. (previously presented) In a video-on-demand system comprising plural video-on-demand clients requesting video programs according to a first video server control protocol, and a

head-end serving video programs according to a second video server control protocol, interposing a proxy server computer between the head-end and the plural clients, the proxy server performing a method comprising:

- from a client, receiving control data representing a video server control action in the first protocol;
- translating the received control data into control data representing a video control action in the second control protocol; and
- sending the translated control data to the head-end.

26. (previously presented) The system of claim 25, further comprising plural video-on-demand clients requesting video programs according to the second video server control protocol and the method further comprises:

- from a second client, receiving control data representing a video server control action in the second protocol; and
- sending to the head-end, the control data received from the second client.

27. (previously presented) The system of claim 25, further comprising a second video server at the head-end, wherein the second video server serves video programs according to the first video server control protocol, and the method further comprises:

- from a second client, receiving control data representing a video server control action in the first protocol; and
- sending to the second video server, the control data received from the second client.

28. (previously presented) A computer-readable medium comprising instructions for performing a method comprising:

- receiving control data from a client requesting video programs according to a first video-on-demand server control protocol;
- translating the received control data into control data representing a video control action in a second video-on-demand server control protocol; and
- sending the translated control data to a head-end serving video-on-demand programs according to the second video-on-demand server control protocol.

29. (previously presented) The computer readable medium of claim 28, wherein the method further comprises:

receiving control data from a second client requesting video programs according to the second video-on-demand server control protocol; and

sending the control data to the head-end serving video-on-demand programs according to the second video-on-demand server control protocol.

30. (previously presented) The computer readable medium of claim 28, wherein the method further comprises:

receiving control data from a second client requesting video programs according to the first video-on-demand server control protocol; and

②
cont.
sending the control data to a second video server at the head-end, wherein the second video server serves video-on-demand programs according to the first video-on-demand server control protocol.

31. (currently amended) A computer-readable medium comprising instructions for performing a method of translating control data for incompatible video-on-demand applications, the method comprising:

receiving from a first client communicating control data according to a first video-on-demand application, control data comprising on-demand video control;

assigning a first transmission channel to the first client;

sending to a head-end communicating control data according to a second video-on-demand application, control data comprising instructions to transmit on-demand video on the first transmission channel;

sending to the first client communicating control data according to the first video-on-demand application, control data comprising instructions to receive on-demand video on the first transmission channel;

receiving from a second client communicating control data according to the first video-on-demand application, control data comprising on-demand video control;

assigning a second transmission channel to the second client;

sending to the head-end communicating control data according to the second video-on-demand application, control data comprising instructions to transmit on-demand video on the second transmission channel; and

sending to the second client communicating control data according to the first video-on-demand application, control data comprising instructions to receive on-demand video on the second transmission channel.

32. (currently amended) A method for assigning video-on-demand transmission channels to transmit on-demand video programming from a head-end communicating control data according to a first on-demand video application to plural clients communicating control data according to a second on-demand video application, the method performed by a proxy server computer receiving and sending control data, the method comprising:

receiving from a first client, a second application control data comprising on-demand video control;

assigning a first transmission channel to the first client;

sending to the head-end, a first application control data comprising instructions to transmit on-demand video on the first transmission channel;

sending to the first client, a second application control data comprising instructions to receive on-demand video on the first transmission channel;

receiving from a second client, a second application control data comprising on-demand video control;

assigning a second transmission channel to the second client;

sending to the head-end, a first application control data comprising instructions to transmit on-demand video on the second transmission channel; and sending to the second client, a second application control data comprising instructions to receive on-demand video on the second transmission channel;

wherein the head-end was designed to communicate with clients communicating control data according to the first on-demand video application.